



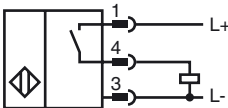
## Model Number

NBN8-12GM50-E2-V1

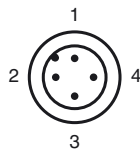
## Features

- 8 mm non-flush
- Increased operating distance
- Extended temperature range

## Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

## Accessories

### BF 12

Mounting flange, 12 mm

### V1-W

4-pin, M12 female field-attachable connector

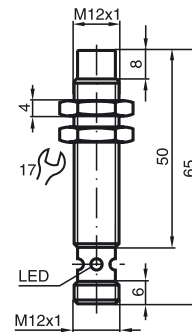
### V1-G-2M-PUR

Cable socket, M12, 4-pin, PUR cable

### V1-W-2M-PUR

Cable socket, M12, 4-pin, PUR cable

## Dimensions



## Technical Data

### General specifications

Switching element function	PNP	NO
Rated operating distance	$s_n$	8 mm
Installation	non-flush	
Output polarity	DC	
Assured operating distance	$s_a$	0 ... 6.48 mm ( -25 ... 70 °C (-13 ... 158 °F) ) 0 ... 6.08 mm ( -40 ... -25 °C (-40 ... -13 °F) )
Reduction factor $r_{Al}$	0.39	
Reduction factor $r_{Cu}$	0.3	
Reduction factor $r_{304}$	0.7	
Reduction factor $r_{Brass}$	0.45	

### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V
Switching frequency	$f$	0 ... 1500 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protected	reverse polarity protected	
Short-circuit protection	pulsing	
Voltage drop	$U_d$	$\leq 3$ V
Operating current	$I_L$	0 ... 200 mA
No-load supply current	$I_0$	$\leq 16$ mA
Indication of the switching state	Multihole-LED, yellow	

### Functional safety related parameters

MTTF <sub>d</sub>	1560 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-40 ... 70 °C (-40 ... 158 °F)
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### Mechanical specifications

Connection type	Device connector M12 x 1 , 4-pin
Housing material	brass, nickel-plated
Sensing face	PBT
Protection degree	IP67

### General information

Scope of delivery	2 self locking nuts in scope of delivery
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### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

### Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	Products with a maximum operating voltage of $\leq 36$ V do not bear a CCC marking because they do not require approval.